

Contents

- Overview
 - 1. Objectives
 - 2. Prerequisites
 - 3. Demo Due Date
 - 4. Scoring
- Function Assignment
- Appendix
 - 1. Human Resource Entity Relationship Diagram

Overview

Objectives

The objectives of this lab are:

- Use aggregate functions.
- Identify the available group functions.
- Use group functions.
- Describe the types of problems that subqueries can solve.
- Define subqueries.
- List the type of subqueries.
- Write single-row and multiple row subqueries.

Prerequisites

- ☐ 1. Read Chapter 4 pages 90-109 and pages 117-127 on Aggregate/Group Functions.
- ☐ 2. Read Chapter 6, pages 168-181 on Subqueries.
- ☐ 3. Work your way through the examples on pages 117-127 and 161-181.
 - For now just read about using the **UPDATE** and **DELETE** statements using subqueries. You will learn more about **UPDATE** and **DELETE** statements in a future lab.
 - You do not have the Store schema tables installed in your schema. The Store schema tables are available in the **STOREDB** schema.

- To use the Store Schema tables in your textbook examples, you need to put **STOREDB.** (dot) in front of the table names. For example, to run the command in the middle of page 34 you would write:

```
SELECT price * 2 DOUBLE_PRICE  
FROM storedb.products;
```

Note the "storedb" can be either upper or lower case.

Demo Due Date:

For all sections, the **lab demo** is due in 1 week (Mar 01-05) by the end of your lab session.

Scoring:

Lab is worth **9** marks. Each query is worth 1 mark.

Functions

- ☐ 4. As per Lab01, create a Lab05 folder.
- 5. For the following, you will need to use the Human Resource tables you created in Lab01. These questions do not use the **STOREDB** tables used in the textbook examples, only the tables you installed from Lab01 (e.g. the **Employees** table). Don't forget to use the DESC statement to view the structure (the column names) of a table. For example, use **DESC Employees** to view the structure of the **Employees** table. The appendix contains an Entity Relationship diagram of the Human Resource tables.
- 6. For the subquery part of this lab you are required to use subqueries in your query statements. **No equijoins or other types of joins should be used.** Use subqueries whenever possible. *** *If your solution to the assignment question does not contain subqueries, you will get **zero** for that question.* ***
- ☐ 4. The file **Lab05_Questions.sql** has 9 questions in it. Download this to your lab05 folder. Each query is worth 1 mark. For this lab you will be required to answer some of the questions using the ANSI **SQL/86** standards and the ANSI **SQL/92** standards.
- ☐ 5. After you have created the SQL query for each question, add that SQL under the question in the file.

Demo

Note: Be sure to use proper formatting in your SQL statements. The **SELECT** should be on one line, the **FROM** on another line and so on. Each clause should start a new line. You will lose marks if you do not

6. Demo to the instructor that your script executes successfully in SQL*Plus. **(9 marks)**

Human Resource Entity Relationship Diagram

- ```
SELECT location_id FROM departments ORDER BY location_id;
```

